# Sailing Directions for South and East Coasts of Honshu

East Coast of Honshu, South Coast of Honshu, South Coast of Shikoku, Nanpo Shoto and Others

March, 2021



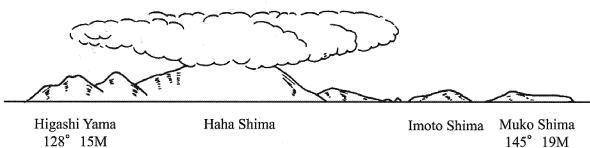
Japan Coast Guard

bottom.

Higashizaki Wan. (26° 38' N, 142° 11' E) This is an open bay entered to the W about 900 m. Temporary anchorage can be obtained at about 550 m offshore in the bay, in depths from 29 m to 36 m, sand, but there are always swells from the E. The coast between Higashi Saki and Minami Saki consists of steep cliffs and there are no landing places.

## Approaches to Haha Shima

Haha Shima seen from the NW



#### **Nishi-no-Shima** (27° 15' N, 140° 53' E) (Chart W1356, W83, W2130)

General information. This island is uninhabited. The length in a N-S direction is about 1,900m, E-W direction is about 1,800m. The peak 160 m high, situated in the Central part of the island. The entire island is covered with lava flow. Around the island is mostly rock or cliff coast.

Precaution for navigation. Vessels intending to navigate near the sea area refer to the article concerning "Precaution while navigating in the vicinity of submarine volcanoes." in Chapter 3 "TOKYO WAN~OGASAWARA GUNTO" of Part 2 "OFF SHORE AND THROUGH ROUTES", and should beware in particular.

#### Kazan Retto (Chart W86, W2130)

General information. Kazan Retto is a group of islands comprising Kita-Io To, Io To and Minami-Io To lying in an N-S direction on a nearly straight line with a interval of about 35 M between 24° 13' N and 25° 27' N.

These islands are new volcanoes and there are many submarine blow holes in the vicinity of Kazan Retto emitting sulphurous vapor.

There are also blow holes on lands emitting sulphurous vapor. Particularly to Io To, heat still remains on the surface of the land and there are many places with high temperature of the ground.

The waters around these three islands are deep but there are rocks above water and sunken reefs around 2 M offshore each of the island.

Landmarks. Kita-Io To and Minami-Io To are high and conspicuous. Io To is flat and not very prominent. Only one lighthouse in these islands is Io To Aeronautical Light.

Caution: Submarine phreatic explosions occurred on the W coast of Io To on September and October, 2001.

#### **Kita-Io To** (25° 26' N, 141° 17' E) (Chart W50)

General information. This is the northernmost island of Kazan Retto. Mountains run in an N-S direction on the central part, the highest peak of which is 792 m high.

Except for a part of the E and NW side, the coast consists of steep cliffs; the heights of some reach about 400 m.

The beaches, apart from a part on the SW side, are composed of rocks or stones; reefs run along the beaches and the outsides are steep-to. There is always heavy surf, which makes landings difficult.

Funka Asane (25° 27' N, 141° 14' E; minimum depth 14 m) is a submarine volcano in WNW about 2M of Kita-Io To, the length in an E-W direction is about 0.5 M; the bottom is rocky and sandy. In strong winds, the sea breaks over it. In the vicinity of this submarine volcano, depths are considerable.

10

15

20

25

30

35

5

Funka Asane erupted mud, ash and flame in 1880. Discolored water is often observed to date afterwards.

Kaitoku Sea-Mount (26° 07' N, 141° 06' E; minimum depth 95 m) is a submarine volcano in NNW about 40M of Kita-Io To, erupted in the sea bottoms in 1984.

Weather. SW wind prevails in spring and summer; NE wind is predominant in autumn; W winds are frequent in January and February. Winds are strong between August and October and the sea is mostly calm in June and July. The most rainfall appears between April and June, and fogs set occasionally in the same months.

**Landmarks.** Kita-Io To can be seen from a distance of about 20 M in a night on a clear day, and it gives a good radar response.



Kita-Io To seen from the SE sky

(Photographed Jan. 2019)

10

15

25

#### **Io To** (24° 47′ N, 141° 19′ E) (Chart W50)

**General information.** This island forming a flat tableland is the largest island in Kazan Retto, about 8.5 km long in a NE-SW direction and lies in the center of Kazan Retto. An airfield is situated on the E side of the central part and Suribachi Yama rises at the SW extremity.

The 10 m depth contour mostly lies within 0.6 M offshore on the NE and the SE coast, and within 0.4 M offshore on the W coast; but the shores are fringed with rocks, drying rocks and sunken rocks, such as Higashi Iwa on the E coast and Kangoku Iwa on the W coast.

The surface of lands is high in temperature and considerably dry in many places. There are neither stream nor well-water. For the most part, the land is barren. Only personnel of the Japan Self-Defense Forces inhabit in this island.

20 Landmarks

Lanumai Ks.			
Landmark	Position	Remarks	
Suribachi Yama	24° 45' N, 141° 17' E	A volcano with a funnel shaped crater, 161 m high. It is in the form of a	
		truncated cone and conspicuous.	
Aeronautical light	24° 46.8' N, 141° 19.6' E	Located nearly in the center of the island, about 112 m high above the	
		ground.	
Higashi Iwa	24° 47′ N, 141° 23′ E	A rock, 4 m high.	
Kangoku Iwa	24° 48' N, 141° 17' E	A rock, 14 m high, about 1 km long in N-S direction and about 200 m	
		long in E-W direction.	

Caution: Io To is still up heaving. Particularly in the vicinity of Kama Iwa on the W coast, and of the NE coast, remarkable upheaval is being observed, which may reportedly be spreading the land.

Strict caution with the change of depths is necessary when approaching and anchoring near the island.

Mooring buoys. Four mooring buoys with a capacity of 3,000 t class are moored between about 400 m and 650 m

SE of Kama Iwa (10 m high) on the W coast, two of which are red and the others are white. They are exclusively for the Japan Self-Defense forces.

**Anchorages.** A place immediately outside of a line joining Suribachi Yama (24° 45.0' N, 141° 17.3' E) and Higashi Iwa (24° 46.8' N, 141° 22.7' E), 12 m deep, sand and clay, gives a good holding ground.

In another anchorage between 750 m and 900 m SSE of Kama Iwa, the bottom of which is coarse sand and slopes steeply, a vessel is liable to drag in winds force 5 (wind velocity of 8.0 to 10.7 m/s) or more.

Anchor chains of mooring buoys are laid in the anchorage mentioned above; therefore anchoring in this area is dangerous.

A position WNW about 550 m of Kama Iwa offers shelter in strong SE wind waves.



Io To seen from the SW

(Photographed Jan. 2019)

#### Approaches to Io To

Io To seen from the S

Aeronautical light

Suribachi Yama



Io To seen from the W

#### **Minami-Io To** (24° 14′ N, 141° 28′ E) (Chart W50)

**General information.** This island is the southernmost island of Kazan Retto, the diameter of which is about 1.9 km. It is bordered with cliffs and stony beaches and is fringed with rocky reefs.

This island is uninhabited and has no fresh water. As the island has been designated to wilderness nature conservation area, the whole area was established to the entering restriction district.

#### Landmarks.

Landmark	Position	Remarks
The peak of the island	24° 14' N, 141° 28' E	It is 916 m high, conical and steep. It is long in N-S direction. The
		peak is frequently enveloped in cloud.

Warning. In the vicinity of Minami-Io To lie numerous submarine volcanoes extending toward SE.

Fukutokuoka-no-Ba is the N of Minami-Io To, an oval shaped flat plateau, on which an island appeared in 1904 but disappeared about 130 days later; in January, 1914, another island raised in the same place again but subsided below the water in the following year. The submarine volcano erupted in July, 2005 and February, 2010 recently. None led to the formation of a new island, but the number of the craters increased.

Until this date, unusual phenomenon such as discolored water are still being reported almost every year, which reveal that volcanic activity still continues in this area. Therefore vessels intending to navigate near the sea area refer to the article concerning "Precaution while navigating in the vicinity of submarine volcanoes." in Chapter 3 "TOKYO WAN ~ OGASAWARA GUNTO" of Part 2 "OFFSHORE AND THROUGH ROUTES", and should beware in particular.

**Discolored water.** The followings are discolored water observed in the area SE of Minami-Io To by the Japan Coast Guard and the Maritime Self-Defense Force.

Date	Name	Position	Range
Mar., 1978	Minami Hiyoshi Seamount [Hiyoshi-Oki-no-Ba]	23° 30' N, 141° 55' E	About 4 M in diameter.
Jul., 1979	Nikko Seamount [Nikko-Ba]	23° 05′ N, 142° 19′ E	About 500 m in diameter.
Jan., 1980	Fukujin Seamount [Fukujin-Oka-no-Ba]	* 49	About 900 m long in N-S direction and about
			450 m long in E-W direction.
Jan., 1981		21° 56' N, 143° 28' E	200 m long and $50 \sim 100$ m wide.
Jan., 1982	- [гикијш-Ока-по-Бај		5,000 m long and 300 m wide.
Dec., 1982			100 m in diameter.
Feb., 1992	Minami Hiyoshi Seamount [Hiyoshi-Oki-no-Ba]	23° 30' N, 141° 56' E	1,000 m long and 700 m wide.
Jan., 1996			About 6,000 m long in N-S direction and about
			1,000 m long in E-W direction.

10

15

20



Minami-Io To seen from the W

(Photographed Jan. 2019)

# Paragraph 3 OTHER ISLANDS

### **Oki-no-Tori Shima** (20° 25' N, 136° 05' E) (Chart W49)

**General information.** This is an oval shaped atoll, about 4.5 km long in E-W direction and about 1.7 km wide at the maximum.

The depths of the lagoon are  $1 \sim 5$  m but there are numerous shallow coral reefs all over the water. The outer rim is enclosed by drying reefs which are dry to about 1 m. Kita-Ko Shima, a brown rock, 1 m high, lies in the vicinity of the W extremity of the atoll. Higashi-Ko Shima is another rock lying about 0.7 M E of Kita-Ko Shima, 0.9 m high.

**Landmarks.** The observational facilities (It is attached Oki-no-Tori Shima light (20° 25.4' N, 136° 04.6' E) at the NW end.) lie between Kita-Ko Shima and Higashi-Ko Shima. It is a good landmark for identifying Oki-no-Tori Shima, and has been seen at an eye-height of about 9 m at about 14 M from the seaward in a good visibility in daytime.

**Caution:** There is Oki-no-Tori Shima offing GPS Wave Observation Light Buoy (20° 24.1' N, 136° 06.6' E) in SSE about 0.1M.

Oki-no-Tori Shima is steep-to. It can be distinguished from the open sea by waves breaking over the outer rim and light green color of the inside; but it was reportedly difficult to find until navigating  $2 \sim 3$  M offshore (the eye-height at that time was 9 m).

The radar response is so poor that it is difficult to identify by radars. The radar response of breakers over the outer rim may be obtained in a calm condition from about 5 M offshore but it can easily be confused with squalls and fishing vessels. Therefore it is recommended to navigate with an enough sea room to Oki-no-Tori Shima.

5

10

15



Oki-no-Tori Shima seen from the W sky

(Photographed Jun. 2018)



Higashi-Ko Shima



Kita-Ko Shima

#### **Minami-Tori Shima** (24° 17′ N, 153° 59′ E) (Chart W48)

General information. This is a flat and low small island in a regular triangle shape with the length of about 1 M. The beaches are wide and composed of white fragments of coral and shells intermingled with a little sand and are surmounted by groups of large rocks. The beaches are enclosed by coral reefs, which extend offshore in places; landing places can be obtained only on the S and the NW sides, other places are washed by heavy surf. The island is thickly covered with trees such as palm trees and some papayas. A Meteorological Agency officer etc. inhabit in the island.

An airstrip runs on the NW side of the island.

**Weather.** Easterly wind prevails throughout the year. The average wind speed is 5 m/s or more during October to next April, which decreases slightly in summer.

The atmospheric temperature is high, 25.4°C on the yearly average; the difference between the highest and the lowest in a year is about 6.9°C. The maximum and the minimum temperature to date is 35.6°C and 15.6°C respectively.

Rainfalls appear on many days over the year but the amount is a little; the yearly average of the amount of precipitation is about 1080 mm; but in February and March it is 50mm from 40 mm.

Thin fog occasionally set in February and March.

10

15

#### Landmarks.

5

10

Landmark	Position	Remarks	
Aeronautical radio beacon	24° 17.5' N, 153° 59.0' E	It is in the NE part of the island.	
Breakwaters	24° 17.0′ N, 153° 58.7′ E	Conspicuous and located in the center of the S coast.  They are black on the white beach.	

Note: Minami-Tori Shima gives a good radar response. When vessels approach from the S, the breakwaters become the very good marks.

**Landing place.** The best landing place is a boat mooring located in the central part of the S coast where there is a small basin, which is protected by breakwaters on the W side (about 20 m long) and the E side (about 30 m), about 25 m wide at the entrance. It is reported that landing cannot be effected in southerly winds with the wind speed of  $7 \sim 8$  m/s. There is a channel cutting through the coral reefs, which is reportedly difficult to find.

**Anchorage.** Vessels (1,000 t class) chartered by the Meteorological Agency reportedly anchor about 250 m SSW of the landing place.



Minami-Tori Shima seen from the S sky

(Photographed Nov. 2018)